

Attachment A
2005 Energy Report
Electricity Load Forecasting Issues
Energy Commission Staff 8/30/2004

The Integrated Energy Policy Report (*Energy Report*), required by Senate Bill 1389 (Chapter 568, Statutes of 2002; Bowen), serves as the foundation for the development of well-designed state energy policy. To establish a solid analytical basis for the *2005 Energy Report*, the Energy Commission intends to require submission of demand forecasts, resource plans, market assessments, and related outlooks from electric and natural gas utilities, transportation fuel and technology suppliers, and other market participants.

To initiate this process, staff has developed a proposed set of forms and instructions for load-serving entities (LSEs) to provide electricity demand forecasts, estimated demand-side management impacts, and related information. Staff's proposal targets all LSEs with a load greater than 200 megawatts (MW), including investor-owned utilities, municipal utilities, and other electricity service providers. The adopted forecast, or range of forecasts, will provide a foundation for the analysis and recommendations of the *2005 Energy Report*, including resource assessment and analysis of progress towards energy efficiency, demand response and renewable energy goals. The forecasts will also serve as a reference case in the California Public Utilities Commission (CPUC) 2006 procurement plan proceeding and in the 2005 California Independent System Operator (CAISO) controlled grid study. Energy Commission demand and supply assessments are also used in the California Gas Report.

The following questions are provided to focus discussion at the workshop on key issues that the Committee will need to address in its order establishing final data submission requirements and schedules. The Committee also invites parties to comment on the appropriate methods and analyses that are needed to provide support for key energy policy questions in the *2005 Energy Report* process.

A. Data Collection and Review Issues

1. Staff's proposal would require all LSEs with a load greater than 200 MW to provide load forecasts and related documentation. Is this the correct set of entities that should be required to provide load forecasts and appropriate background documentation to the Energy Commission for the *2005 Energy Report*?
2. Is staff's proposed 10-year forecast timeframe appropriate for use in the trend assessment and market performance evaluation analyses that the Public Resources Code, section 25300 et seq. establishes for the *Energy Report*?
3. Is the "free form" uncertainty assessment proposed by staff sufficient or should standardized requirements be developed for all LSEs to use?
4. In its current procurement proceeding (R.01-10-024), the CPUC has required the investor-owned utilities to make use of the information and analyses from the *2003 Energy Report*. In decision D.04-01-050, the CPUC also outlined an approach

intended to ensure coordination with the *Energy Report* process. Are there additional steps the Energy Commission should take during the collection, review, and application of LSE load forecasts in the *Energy Report* to improve coordination with future CPUC procurement proceedings?

5. Some LSEs have captive customer bases while others compete for a share of the retail market. This difference results in very different perspectives on forecasting future load the LSEs will service. How can the *Energy Report* review of LSE load forecasts address the wide range of perspectives among LSEs?
6. Coordination agreements between Energy Commission and CPUC provide a foundation for the Energy Commission to perform intensive reviews of IOU load forecasts. What comparable regulatory oversight purposes exist for other types of LSEs?
7. What level of disaggregation of load forecasts is important to improve the usability of adopted Energy Commission load forecasts for use in the CAISO annual grid planning process?
8. Should the Energy Commission adopt for each LSE: (1) a single deterministic load forecast, (2) a reference case and a high and low scenario around that reference case, (3) a range which encompasses 90 percent of possible future loads, or (4) a probability distribution for future loads?

B. Substantive Load Forecasting Issues

1. What are the key uncertainties affecting the actual amount of electricity that end-users will consume in California through a 10-year time horizon?
2. What are the key uncertainties that affect the amount of retail load that LSEs, of various types and legal/regulatory constructs, should expect to serve through a 10-year timeframe?
3. What is the best way to address the quantitative significance of these physical and legal/regulatory uncertainties?